

6560-50-P

### ENVIRONMENTAL PROTECTION AGENCY

#### **40 CFR Part 52**

[EPA-R04-OAR-2019-0008; FRL-10005-27-Region 4]

Air Plan Approval; FL; 2010 1-Hour SO<sub>2</sub> NAAQS Transport Infrastructure

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve Florida's September 18, 2018, State Implementation Plan (SIP) submission pertaining to the "good neighbor" provision of the Clean Air Act (CAA or Act) for the 2010 1-hour sulfur dioxide (SO<sub>2</sub>) National Ambient Air Quality Standard (NAAQS). The good neighbor provision requires each state's implementation plan to address the interstate transport of air pollution in amounts that contribute significantly to nonattainment, or interfere with maintenance, of a NAAQS in any other state. In this action, EPA is proposing to determine that Florida will not contribute significantly to nonattainment or interfere with maintenance of the 2010 1-hour SO<sub>2</sub> NAAQS in any other state. Therefore, EPA is proposing to approve the September 18, 2018, SIP revision as meeting the requirements of the good neighbor provision for the 2010 1-hour SO<sub>2</sub> NAAQS.

**DATES**: Written comments must be received on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R04-OAR-2019-0008 at <a href="http://www.regulations.gov">http://www.regulations.gov</a>. Follow the online instructions for submitting comments.

Once submitted, comments cannot be edited or removed from Regulations.gov. EPA may publish any comment received to its public docket. Do not submit electronically any information

you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit http://www.epa.gov/dockets/commenting-epa-dockets.

FOR FURTHER INFORMATION CONTACT: Michele Notarianni, Air Regulatory

Management Section, Air Planning and Implementation Branch, Air and Radiation Division,

U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia

30303-8960. Ms. Notarianni can be reached via phone number (404) 562-9031 or via electronic mail at notarianni.michele@epa.gov.

#### SUPPLEMENTARY INFORMATION:

## I. Background

#### A. Infrastructure SIPs

On June 2, 2010, EPA promulgated a revised primary SO<sub>2</sub> NAAQS with a level of 75 parts per billion (ppb), based on a 3-year average of the annual 99<sup>th</sup> percentile of 1-hour daily maximum concentrations. *See* 75 FR 35520 (June 22, 2010). Whenever EPA promulgates a new or revised NAAQS, CAA section 110(a)(1) requires states to make SIP submissions to provide for the implementation, maintenance, and enforcement of the NAAQS. This particular type of SIP submission is commonly referred to as an "infrastructure SIP." These submissions must meet the various requirements of CAA section 110(a)(2), as applicable.

Section 110(a)(2)(D)(i)(I) of the CAA requires SIPs to include provisions prohibiting any source or other type of emissions activity in one state from emitting any air pollutant in amounts that will contribute significantly to nonattainment, or interfere with maintenance, of the NAAQS in another state. The two clauses of this section are referred to as prong 1 (significant contribution to nonattainment) and prong 2 (interference with maintenance of the NAAQS).

On September 18, 2018, the Florida Department of Environmental Protection (FDEP) submitted a revision to the Florida SIP addressing prongs 1 and 2 of CAA section 110(a)(2)(D)(i)(I) for the 2010 1-hour SO<sub>2</sub> NAAQS.<sup>1</sup> EPA is proposing to approve FDEP's September 18, 2018, SIP submission because, based on the information available at the time of this rulemaking, the State demonstrated that Florida will not contribute significantly to nonattainment, or interfere with maintenance, of the 2010 1-hour SO<sub>2</sub> NAAQS in any other state. All other elements related to the infrastructure requirements of section 110(a)(2) for the 2010 1-hour SO<sub>2</sub> NAAQS for Florida have been addressed in separate rulemakings.<sup>2</sup>

### B. 2010 1-Hour SO<sub>2</sub> NAAQS Designations Background

In this action, EPA has considered information from the 2010 1-hour SO<sub>2</sub> NAAQS designations process, as discussed in more detail in section III.C of this notice. For this reason, a brief summary of EPA's designations process for the 2010 1-hour SO<sub>2</sub> NAAQS is included here.<sup>3</sup>

 $<sup>^1</sup>$  On June 3, 2013, and supplemented on January 8, 2014, FDEP submitted SIP revisions addressing all infrastructure elements with respect to the 2010 1-hour SO<sub>2</sub> NAAQS with the exception of prongs 1 and 2 of CAA  $^110(a)(2)(D)(i)(I)$ .

 $<sup>^2</sup>$  EPA acted on the other elements of Florida's June 3, 2013, infrastructure SIP submission, as supplemented on January 8, 2014, for the 2010 1-hour SO<sub>2</sub> NAAQS on September 30, 2016 (81 FR 67179).

<sup>&</sup>lt;sup>3</sup> While designations may provide useful information for purposes of analyzing transport, particularly for a more source-specific pollutant such as SO<sub>2</sub>, EPA notes that designations themselves are not dispositive of whether or not upwind emissions are impacting areas in downwind states. EPA has consistently taken the position that CAA section 110(a)(2)(D)(i)(I) addresses "nonattainment" anywhere it may occur in other states, not only in designated nonattainment areas nor any similar formulation requiring that designations for downwind nonattainment areas must

After the promulgation of a new or revised NAAQS, EPA is required to designate areas as "nonattainment," "attainment," or "unclassifiable" pursuant to section 107(d)(1) of the CAA. The process for designating areas following promulgation of a new or revised NAAQS is contained in section 107(d) of the CAA. The CAA requires EPA to complete the initial designations process within two years of promulgating a new or revised standard. If the Administrator has insufficient information to make these designations by that deadline, EPA has the authority to extend the deadline for completing designations by up to one year.

EPA promulgated the 2010 1-hour SO<sub>2</sub> NAAQS on June 2, 2010. *See* 75 FR 35520 (June 22, 2010). EPA completed the first round of designations ("round 1")<sup>4</sup> for the 2010 1-hour SO<sub>2</sub> NAAQS on July 25, 2013, designating 29 areas in 16 states as nonattainment for the 2010 1-hour SO<sub>2</sub> NAAQS. *See* 78 FR 47191 (August 5, 2013). EPA signed Federal Register notices of promulgation for round 2 designations<sup>5</sup> on June 30, 2016 (81 FR 45039 (July 12, 2016)) and on November 29, 2016 (81 FR 89870 (December 13, 2016)), and round 3 designations<sup>6</sup> on December 21, 2017 (83 FR 1098 (January 9, 2018)).<sup>7</sup>

On August 21, 2015 (80 FR 51052), EPA separately promulgated air quality characterization requirements for the 2010 1-hour SO<sub>2</sub> NAAQS in the Data Requirements Rule

first have occurred. *See e.g.*, Clean Air Interstate Rule, 70 FR 25162, 25265 (May 12, 2005); Cross-State Air Pollution Rule, 76 FR 48208, 48211 (August 8, 2011); Final Response to Petition from New Jersey Regarding SO<sub>2</sub> Emissions From the Portland Generating Station, 76 FR 69052 (November 7, 2011) (finding facility in violation of the prohibitions of CAA section 110(a)(2)(D)(i)(I) with respect to the 2010 1-hour SO<sub>2</sub> NAAQS prior to issuance of designations for that standard).

<sup>&</sup>lt;sup>4</sup> The term "round" in this instance refers to which "round of designations."

 $<sup>^5</sup>$  EPA and state documents and public comments related to the round 2 final designations are in the docket at regulations.gov with Docket ID No. EPA-HQ-OAR-2014-0464 and at EPA's website for SO<sub>2</sub> designations at https://www.epa.gov/sulfur-dioxide-designations.

<sup>&</sup>lt;sup>6</sup> EPA and state documents and public comments related to round 3 final designations are in the docket at regulations.gov with Docket ID No. EPA-HQ-OAR-2017-0003 and at EPA's website for SO<sub>2</sub> designations at https://www.epa.gov/sulfur-dioxide-designations.

<sup>&</sup>lt;sup>7</sup> Consent Decree, *Sierra Club* v. *McCarthy*, Case No. 3:13-cv-3953-SI (N.D. Cal. Mar. 2, 2015). This consent decree requires EPA to sign for publication in the Federal Register notices of the Agency's promulgation of area designations for the 2010 1-hour SO<sub>2</sub> NAAQS by three specific deadlines: July 2, 2016 ("round 2"); December 31, 2017 ("round 3"); and December 31, 2020 ("round 4").

(DRR). The DRR requires state air agencies to characterize air quality, through air dispersion modeling or monitoring, in areas associated with sources that emitted 2,000 tons per year (tpy) or more of SO<sub>2</sub>, or that have otherwise been listed under the DRR by EPA or state air agencies. In lieu of modeling or monitoring, state air agencies, by specified dates, could elect to impose federally-enforceable emissions limitations on those sources restricting their annual SO<sub>2</sub> emissions to less than 2,000 tpy, or provide documentation that the sources have been shut down. EPA expected that the information generated by implementation of the DRR would help inform designations for the 2010 1-hour SO<sub>2</sub> NAAQS that must be completed by December 31, 2020 ("round 4").

In rounds 1 and 3 of designations, EPA designated three SO<sub>2</sub> nonattainment areas and one unclassifiable area in Florida. In round 1, EPA designated portions of Nassau and Hillsborough counties as nonattainment for the 2010 1-hour SO<sub>2</sub> NAAQS based on air quality monitoring data (Nassau, FL Area and Hillsborough, FL Area, respectively).<sup>8</sup> In round 3, EPA designated portions of Hillsborough and Polk counties (Hillsborough-Polk, FL Area) as nonattainment for the 2010 1-hour SO<sub>2</sub> NAAQS based on air quality modeling.<sup>9</sup> EPA also

\_

<sup>&</sup>lt;sup>8</sup> The Nassau and Hillsborough Areas are currently attaining the 2010 1-hour SO<sub>2</sub> NAAQS based on complete, quality-assured, and certified air quality monitoring data for 2016-2018 and air dispersion modeling showing attainment of the 2010 1-hour SO<sub>2</sub> NAAQS in the area. Florida submitted a request that EPA redesignate both areas to attainment, and EPA approved the redesignation request and associated maintenance plan for the Nassau Area on April 24, 2019 (84 FR 17085). EPA approved the redesignation request and associated maintenance plan for the Hillsborough Area on November 12, 2019 (84 FR 60927). EPA approved the attainment demonstration for the Nassau Area on July 3, 2017, and incorporated the new allowable emission rates and control measures into the SIP, making them permanent and enforceable. *See* 82 FR 30749. EPA's redesignation of the Nassau Area was based, in part, on a modeled attainment demonstration that included permanent and enforceable SO<sub>2</sub> controls and emissions limits at the Rayonier and WestRock facilities showing attainment of the 2010 1-hour SO<sub>2</sub> standard by the statutory deadline.

<sup>&</sup>lt;sup>9</sup> EPA designated a portion of Citrus County, Florida as unclassifiable in round 3 designations on December 21, 2017 (83 FR 1098). However, on March 28, 2018, EPA withdrew the designation of unclassifiable for the area and established a designation of attainment/unclassifiable for that area based on complete, quality-assured and certified air quality monitoring data from 2017 submitted by FDEP, and modeling showing attainment of the 2010 1-hour SO<sub>2</sub> NAAQS in the area. *See* 83 FR 14597 (April 5, 2018). On September 9, 2019 (84 FR 47216), EPA proposed approval of Florida's February 15, 2019, draft redesignation requests and maintenance plan for the round 3 Hillsborough-Polk County SO<sub>2</sub> nonattainment area, the redesignation request for the Mulberry unclassifiable area,

designated portions of Hillsborough and Polk counties (Mulberry, FL Area) as unclassifiable for the 2010 1-hour SO<sub>2</sub> NAAQS in round 3. The remaining counties in Florida were designated as attainment/unclassifiable in round 3; therefore, no areas in Florida will be designated in round 4.10

#### II. Relevant Factors Used to Evaluate 2010 1-Hour SO<sub>2</sub> Interstate Transport SIPs

Although SO<sub>2</sub> is emitted from a similar universe of point and nonpoint sources as is directly emitted fine particulate matter (PM<sub>2.5</sub>) and the precursors to ozone and PM<sub>2.5</sub>, interstate transport of SO<sub>2</sub> is unlike the transport of PM<sub>2.5</sub> or ozone because SO<sub>2</sub> emissions sources usually do not have long range SO<sub>2</sub> impacts. The transport of SO<sub>2</sub> relative to the 2010 1-hour SO<sub>2</sub> NAAQS is more analogous to the transport of lead (Pb) relative to the Pb NAAQS in that emissions of SO<sub>2</sub> typically result in 1-hour pollutant impacts of possible concern only near the emissions source. However, ambient 1-hour concentrations of SO<sub>2</sub> do not decrease as quickly with distance from the source as do 3-month average concentrations of Pb, because SO<sub>2</sub> gas is not removed by deposition as rapidly as are Pb particles and because SO<sub>2</sub> typically has a higher emissions release height than Pb. Emitted SO<sub>2</sub> has wider ranging impacts than emitted Pb, but it does not have such wide-ranging impacts that treatment in a manner similar to ozone or PM<sub>2.5</sub> would be appropriate. Accordingly, while the approaches that EPA has adopted for ozone or PM<sub>2.5</sub> transport are too regionally focused, the approach for Pb transport is too tightly circumscribed to the source. SO<sub>2</sub> transport is therefore a unique case and requires a different approach.

and adoption of new 24-hour SO<sub>2</sub> emission limits for the two primary emission sources in the areas. The public comment period has closed, and EPA is not reopening that comment period through this infrastructure proposal. <sup>10</sup> See Technical Support Document: Chapter 9 Final Round 3 Area Designations for the 2010 1-Hour SO<sub>2</sub> Primary National Ambient Air Quality Standard for Florida at https://www.epa.gov/sites/production/files/2017-12/documents/09-fl-so2-rd3-final.pdf. See also Technical Support Document: Chapter 9 Intended Round 3 Area Designations for the 2010 1-Hour SO<sub>2</sub> Primary National Ambient Air Quality Standard for Florida at https://www.epa.gov/sites/production/files/2017-08/documents/9\_fl\_so2\_rd3-final.pdf.

In this proposed rulemaking, as in prior  $SO_2$  transport analyses, EPA focuses on a 50 km-wide zone because the physical properties of  $SO_2$  result in relatively localized pollutant impacts near an emissions source that drop off with distance. Given the properties of  $SO_2$ , EPA selected a spatial scale with dimensions from four to 50 kilometers (km) from point sources – the "urban scale" – to assess trends in area-wide air quality that might impact downwind states.<sup>11</sup>

In its SIP submission, FDEP identified a distance threshold to reflect the transport properties of SO<sub>2</sub>. FDEP selected the "urban scale" as appropriate in assessing trends in both area-wide air quality and the effectiveness of large-scale pollution control strategies at such point sources. FDEP supported this transport distance threshold with references to the March 1, 2011, EPA memorandum titled "Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO<sub>2</sub> National Ambient Air Quality Standard," and noted that this clarification applies equally to the 2010 1-hour SO<sub>2</sub> standard.<sup>12</sup> The memorandum offers a general guideline for estimating the distance to maximum 1-hour impact and the region of significant concentration gradients that may apply in relatively flat terrain, which is approximately 10 times the source's release height.<sup>13</sup> FDEP states that no SO<sub>2</sub> source in Florida (which has flat terrain) has a stack height of more than 205 meters and thus, the maximum distance to a significant concentration gradient from a Florida source is approximately 2,050 meters (i.e., 2.05 km) from the source, after which a source's impacts decrease significantly.

\_

<sup>&</sup>lt;sup>11</sup> For the definition of spatial scales for SO<sub>2</sub>, see 40 CFR Part 58, Appendix D, section 4.4 ("Sulfur Dioxide (SO<sub>2</sub>) Design Criteria"). For further discussion on how EPA applies these definitions with respect to interstate transport of SO<sub>2</sub>, see EPA's proposed rulemaking on Connecticut's SO<sub>2</sub> transport SIP. See 82 FR 21351, 21352, 21354 (May 8, 2017).

<sup>&</sup>lt;sup>12</sup> EPA's March 1, 2011, memorandum, *Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO<sub>2</sub> National Ambient Air Quality Standard*, is available at: https://www.epa.gov/sites/production/files/2015-07/documents/appwno2\_2.pdf.

<sup>&</sup>lt;sup>13</sup> Id. at pp. 15-16.

Additionally, the memorandum indicates that the inclusion of all emissions sources within 50 km of the source under analysis is likely to produce an overly conservative result in most cases.

Given the properties of SO<sub>2</sub>, EPA preliminarily agrees with Florida's selection of the urban scale to assess trends in area-wide air quality that might impact downwind states. As discussed further in section III.B, EPA believes that Florida's selection of the urban scale is appropriate for assessing trends in both area-wide air quality and the effectiveness of large-scale pollution control strategies at SO<sub>2</sub> point sources. Florida's selection of this transport distance for SO<sub>2</sub> is consistent with 40 CFR 58, Appendix D, Section 4.4.4(4) "Urban scale," which states that measurements in this scale would be used to estimate SO<sub>2</sub> concentrations over large portions of an urban area with dimensions from four to 50 km. The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) is EPA's preferred modeling platform for regulatory purposes for near-field dispersion of emissions for distances up to 50 km. *See* Appendix W of 40 CFR part 51. Thus, EPA concurs with Florida's application of the 50-km threshold as a reasonable distance to evaluate emission source impacts into neighboring states and to assess air quality monitors within 50 km of the State's border, which is discussed further in section III.C.

As discussed in sections III.C and III.D, EPA first reviewed Florida's analysis to assess how the State evaluated the transport of SO<sub>2</sub> to other states, the types of information used in the analysis, and the conclusions drawn by the State. EPA then conducted a weight of evidence analysis based on a review of the State's submission and other available information, including

SO<sub>2</sub> air quality and available source modeling for other states' sources within 50 km of the Florida border.<sup>14</sup>

# III. Florida's SIP Submission and EPA's Analysis

#### A. State Submission

On September 18, 2018, FDEP submitted a revision to the Florida SIP addressing prongs 1 and 2 of CAA section 110(a)(2)(D)(i)(I) for the 2010 1-hour SO<sub>2</sub> NAAQS. Florida conducted a weight of evidence analysis to examine whether SO<sub>2</sub> emissions from the State adversely affect attainment or maintenance of the 2010 1-hour SO<sub>2</sub> NAAQS in downwind states.

FDEP concluded that the State is meeting its prong 1 and prong 2 obligations for the 2010 1-hour SO<sub>2</sub> NAAQS. FDEP based its conclusions on: trends in SO<sub>2</sub> design values (DVs)<sup>15</sup> at the State's air quality monitors from 2007-2017; SO<sub>2</sub> DVs for monitors located within 50 km of the Florida border; SO<sub>2</sub> emissions trends statewide from 2000-2017; the change in SO<sub>2</sub> emissions from 2014-2017 at the largest sources of SO<sub>2</sub> within 50 km of the border; available SO<sub>2</sub> modeling data for the State's round 3 DRR sources; and SIP-approved State and federal regulations that establish requirements for sources of SO<sub>2</sub> emissions. EPA's evaluation of Florida's September 18, 2018, SIP submission is detailed in sections III.B, C, and D.

\_

<sup>&</sup>lt;sup>14</sup> This proposed approval action is based on the information contained in the administrative record for this action and does not prejudge any other future EPA action that may make other determinations regarding Florida's or any neighboring state's air quality status. Any such future actions, such as area designations under any NAAQS, will be based on their own administrative records and EPA's analyses of information that become available at those times. Future available information may include, and is not limited to, monitoring data and modeling analyses conducted pursuant to the DRR and information submitted to EPA by states, air agencies, and third-party stakeholders such as citizen groups and industry representatives.

 $<sup>^{15}</sup>$  A "Design Value" is a statistic that describes the air quality status of a given location relative to the level of the NAAQS. The DV for the primary 2010 1-hour  $SO_2$  NAAQS is the 3-year average of annual  $99^{th}$  percentile daily maximum 1-hour values for a monitoring site. For example, the 2017 DV is calculated based on the three-year average from 2015-2017. The interpretation of the primary 2010 1-hour  $SO_2$  NAAQS including the data handling conventions and calculations necessary for determining compliance with the NAAQS can be found in Appendix T to 40 CFR Part 50.

### B. EPA's Evaluation Methodology

EPA believes that a reasonable starting point for determining which sources and emissions activities in Florida are likely to impact downwind air quality in other states with respect to the 2010 1-hour SO<sub>2</sub> NAAQS is by using information in EPA's National Emissions Inventory (NEI).<sup>16</sup> The NEI is a comprehensive and detailed estimate of air emissions for criteria pollutants, criteria pollutant precursors, and hazardous air pollutants from air emissions sources, that is updated every three years using information provided by the states and other information available to EPA. EPA evaluated data from the 2014 NEI (version 2), the most recently available, complete, and quality assured dataset of the NEI.

FDEP provided 2014 NEI SO<sub>2</sub> emissions data statewide by source category. FDEP states that fuel combustion by electric generating units (EGUs) is the largest source of SO<sub>2</sub> emissions in Florida, representing 60 percent of the State's SO<sub>2</sub> emissions. FDEP also states that other large sources of SO<sub>2</sub> emissions in Florida include chemical and allied product manufacturing and fuel combustion at industrial sources, which, when added to the EGU SO<sub>2</sub> emissions, comprise 80 percent of Florida's total SO<sub>2</sub> emissions.

As shown in Table 1, the majority of SO<sub>2</sub> emissions in Florida originate from fuel combustion at point sources.<sup>17</sup> In 2014, the total SO<sub>2</sub> emissions from point sources in Florida comprised approximately 83 percent of the total SO<sub>2</sub> emissions in the State. Further analysis of these data show that SO<sub>2</sub> emissions from fuel combustion from point sources make up approximately 68 percent of the State's total SO<sub>2</sub> emissions. Because emissions from the other

<sup>&</sup>lt;sup>16</sup> EPA's NEI is available at https://www.epa.gov/air-emissions-inventories/national-emissions-inventory.

<sup>&</sup>lt;sup>17</sup> Florida's point sources listed in Table 1, for the purposes of this proposed action, are comprised of all of the "Fuel Combustion" categories and "Industrial Processes (All Categories)," with the exception of residential fuel combustion. Residential fuel consumption is considered a nonpoint source, and thus, residential fuel combustion data is not included in the point source fuel combustion data and related calculations.

listed source categories are more dispersed throughout the State, those categories are less likely to cause high ambient concentrations when compared to a point source on a ton-for-ton basis. Based on EPA's analysis of the 2014 NEI, EPA believes that it is appropriate to focus the analysis on SO<sub>2</sub> emissions from Florida's larger point sources (i.e., emitting over 100 tpy of SO<sub>2</sub> in 2017), which are located within the "urban scale," i.e., within 50 km of one or more state borders.

Table 1: Summary of 2014 NEI (Version 2) SO <sub>2</sub> Data for Florida by Source Type								
Category	Emissions (tpy)  Percent of Total SO <sub>2</sub> Emissions							
Fuel Combustion: EGUs (All Fuel Types)	99,362.87	60.4						
Fuel Combustion: Industrial Boilers/Internal Combustion		7.2						
Engines (All Fuel Types)	11,868.39							
Fuel Combustion: Commercial/Institutional (All Fuel Types)	188.60	0.1						
Fuel Combustion: Residential (All Fuel Types)	91.66	0.1						
Industrial Processes (All Categories)	24,904.24	15.1						
Mobile Sources (All Categories)	12,534.89	7.6						
Fires (All Types)	13,342.46	8.1						
Waste Disposal	2,161.72	1.3						
Solvent Processes	0.15	0						
Miscellaneous (Non-Industrial)	13.50	0						
SO <sub>2</sub> Emissions Total	164,468.48	100						

As explained in Section II, because the physical properties of SO<sub>2</sub> result in relatively localized pollutant impacts near an emissions source that drop off with distance, in SO<sub>2</sub> transport analyses, EPA focuses on a 50 km-wide zone. Thus, EPA focused its evaluation on Florida's point sources of SO<sub>2</sub> emissions located within approximately 50 km of another state and their potential impact on neighboring states.

As discussed in section I.B., EPA's current implementation strategy for the 2010 1-hour SO<sub>2</sub> NAAQS includes the flexibility to characterize air quality for stationary sources subject to the DRR via either data collected at ambient air quality monitors sited to capture the points of

maximum concentration, or air dispersion modeling (hereinafter referred to as "DRR monitors" or "DRR modeling," respectively). EPA's assessment of SO<sub>2</sub> emissions from Florida's point sources located within approximately 50 km of another state and their potential impacts on neighboring states (see sections III.C.1. and II.C.2 of this notice) and SO<sub>2</sub> air quality data at monitors within 50 km of the Florida border (see section III.C.3. of this notice) is informed by all available data at the time of this proposed rulemaking.<sup>18</sup>

As described in Section III, EPA proposes to conclude that an assessment of Florida's satisfaction of the prong 1 and 2 requirements under section 110(a)(2)(D)(i)(I) of the CAA for the 2010 1-hour SO<sub>2</sub> NAAQS may be reasonably based upon evaluating the downwind impacts via modeling and an assessment of SO<sub>2</sub> emissions from Florida's point sources emitting more than 100 tpy of SO<sub>2</sub> (including fuel combustion sources) that are located within approximately 50 km of another state, and upon any federal regulations and SIP-approved regulations affecting SO<sub>2</sub> emissions of Florida's sources.

# C. EPA's Prong 1 Evaluation – Significant Contribution to Nonattainment

Prong 1 of the good neighbor provision requires states' plans to prohibit emissions that will contribute significantly to nonattainment of a NAAQS in another state. FDEP asserts in its submission that Florida will not contribute significantly to nonattainment in any other state with respect to the 2010 1-hour SO<sub>2</sub> standard. To evaluate Florida's satisfaction of prong 1, EPA assessed the State's SIP submission with respect to the following factors: 1) potential ambient impacts of SO<sub>2</sub> emissions from certain facilities in Florida on neighboring states based on available SO<sub>2</sub> designation air dispersion modeling results; 2) SO<sub>2</sub> emissions from Florida

<sup>1</sup> 

 $<sup>^{18}</sup>$  EPA notes that the evaluation of other states' satisfaction of section 110(a)(2)(D)(i)(I) for the 2010 1-hour SO<sub>2</sub> NAAQS can be informed by similar factors found in this proposed rulemaking but may not be identical to the approach taken in this or any future rulemaking for Florida, depending on available information and state-specific circumstances.

sources; 3) SO<sub>2</sub> ambient air quality for Florida and neighboring states; 4) SIP-approved Florida regulations that address SO<sub>2</sub> emissions; and 5) federal regulations that reduce SO<sub>2</sub> emissions at Florida sources. A detailed discussion of Florida's SIP submission with respect to each of these factors follows.<sup>19</sup> EPA proposes, based on the information available at the time of this rulemaking, that these factors, taken together, support the Agency's proposed determination that Florida will not contribute significantly to nonattainment of the 2010 1-hour SO<sub>2</sub> NAAQS in another state. As discussed in the following sections, EPA's proposed conclusion is based, in part, on the fact that modeling results for Florida's four DRR sources within 50 km of another state's border indicate that the maximum impacts do not exceed the level of the 2010 1-hour SO<sub>2</sub> NAAQS. Regarding three out-of-state DRR sources within 50 km of the Florida border which are located in Alabama, the information available to the Agency does not indicate there are violations of the 2010 1-hour SO<sub>2</sub> NAAQS in Alabama to which Florida sources could contribute. In addition, 2017 SO<sub>2</sub> emissions for Florida's non-DRR sources emitting over 100 tons of SO<sub>2</sub> within 50 km of another state are at distances or emit levels of SO<sub>2</sub> that make it unlikely that these SO<sub>2</sub> emissions could interact with SO<sub>2</sub> emissions from the neighboring states' sources in such a way as to contribute significantly to nonattainment in neighboring states. Finally, the downward trends in SO<sub>2</sub> emissions and DVs for air quality monitors in the State, combined with federal regulations and SIP-approved regulations affecting SO<sub>2</sub> emissions of Florida's sources, further support EPA's proposed conclusion.

<sup>&</sup>lt;sup>19</sup> EPA has reviewed Florida's submission, and where new or more current information has become available, is including this information as part of the Agency's evaluation of this submission.

### 1. SO<sub>2</sub> Designations Air Dispersion Modeling

#### a. State Submission

In Appendix 2 to Florida's SIP revision, FDEP included the State's January 13, 2017, modeling reports for the four DRR sources in the State within 50 km of the Florida border: Jacksonville Electric Authority (JEA) - Northside Generating Station (NGS)/St. Johns River Power Park (SJRPP); 20:21 WestRock CP, LLC - Fernandina Beach Mill (WestRock); Gulf Power Crist Plant (Crist Plant); and White Springs Agricultural Chemical - Swift Creek Chemical Complex (White Springs). Florida used AERMOD to evaluate the area around each of these sources to satisfy the requirements of the DRR and ran the model for the years 2012-2014 using actual emissions data and monitored SO<sub>2</sub> background concentrations. FDEP asserts that the modeling results indicate that the area surrounding each facility is in attainment of the 2010 1-hour SO<sub>2</sub> NAAQS, as shown in the modeling reports included in Appendix 2 of the State's 2018 submission. FDEP included a table showing emissions decreases for these DRR sources from 2014 to 2017 (see Table 2 of Appendix 1 to Florida's SIP submission), and states that since 2014, actual emissions from these sources have collectively decreased by 74 percent.<sup>22</sup> A summary of the modeling results for Florida's DRR sources within 50 km of the State's border, including supplemental data EPA has reviewed as part of the Agency's analysis, is shown in Table 2 of section III.C.1.b.

### b. EPA Analysis

\_

<sup>&</sup>lt;sup>20</sup> JEA owns and operates the combined NGS and SJRPP facility in Jacksonville, Florida. Table 2 of Appendix 1 in Florida's September 18, 2018, SIP submission lists JEA NGS and JEA SJRRP separately; however, these sources are modeled as one source under the DRR.

<sup>&</sup>lt;sup>21</sup> Units 1 and 2 at St. John River Power Park shut down, effective December 31, 2017.

<sup>&</sup>lt;sup>22</sup> EPA notes that on page 5 of the State's September 18, 2018, SIP submission, FDEP inadvertently states that since 2014, actual emissions from the four DRR sources in Florida within 50 km of the border have decreased by 65 percent. EPA has confirmed that the value of 74 percent in Table 2 of Appendix 1 is correct.

EPA evaluated the DRR modeling data in Florida's SIP submission for sources in the State and supplemented this data with available DRR modeling results for sources in adjacent states (i.e., Alabama and Georgia) that are within 50 km of the Florida border.<sup>23</sup> The purpose of evaluating modeling results in adjacent states within 50 km of the Florida border is to ascertain whether any nearby sources in Florida are impacting a violation of the 2010 1-hour SO<sub>2</sub> NAAQS in another state.

Table 2 provides a summary of the modeling results for the four modeled DRR sources in Florida which are located within 50 km of another state. The modeling analyses for these four DRR sources resulted in no modeled violations of the 2010 1-hour SO<sub>2</sub> NAAQS within the modeling domains for each facility. As a result, no further analysis is necessary for assessing the impacts of the interstate transport of SO<sub>2</sub> pollution from these sources.

Tab	Table 2: Florida Sources with DRR Modeling Located Within 50 km of Another State								
DRR Source	County	Approximate Distance from Source to Adjacent State (km)	Other Facilities Included in Modeling?	Modeled 99 <sup>th</sup> Percentile Daily Maximum 1-Hour SO <sub>2</sub> Concentration (ppb)	Model Grid Extends Into Another State?				
Crist Plant	Escambia	17 (AL)	Yes – International Paper Pensacola Facility (FL)	33.81 (based on 2012-2014 actual emissions for both facilities)	No				
JEA - NGS/SJR	Duval	35 (GA)	Yes – Cedar Bay/Generating	56.22 (based on 2012-2014 actual	No				

\_

<sup>&</sup>lt;sup>23</sup> As discussed in section I.B., Florida used air dispersion modeling to characterize air quality in the vicinity of certain SO<sub>2</sub> emitting sources to identify the maximum 1-hour SO<sub>2</sub> concentrations in ambient air which informed EPA's round 3 SO<sub>2</sub> designations. EPA's preferred modeling platform for regulatory purposes is AERMOD (Appendix W of 40 CFR part 51). In these DRR modeling analyses using AERMOD, the impacts of the actual emissions for one or more of the recent 3-year periods (e.g., 2012-2014, 2013-2015, 2014-2016) were considered, and in some cases, the modeling was of currently effective limits on allowable emissions in lieu of or as a supplement to modeling of actual emissions. The available air dispersion modeling of certain SO<sub>2</sub> sources can support transport related conclusions about whether sources in one state will potentially contribute significantly to nonattainment or interfere with maintenance of the 2010 1-hour SO<sub>2</sub> standard in other states. While AERMOD was not designed specifically to address interstate transport, the 50-km distance that EPA recommends for use with AERMOD aligns with the concept that there are localized pollutant impacts of SO<sub>2</sub> near an emissions source that drop off with distance. Thus, EPA believes that the use of AERMOD provides a reliable indication of air quality for transport purposes.

Table 2: Florida Sources with DRR Modeling Located Within 50 km of Another State								
DRR Source	County	Approximate Distance from Source to Adjacent State (km)	Other Facilities Included in Modeling?	Modeled 99 <sup>th</sup> Percentile Daily Maximum 1-Hour SO <sub>2</sub> Concentration (ppb)	Model Grid Extends Into Another State?			
PP			Plant, Renessenz Jacksonville Facility (now Symrise, Inc.), Anchor Glass Jacksonville Plant, and IFF Chemical Holdings (FL)	emissions for SJRPP and Renessenz Jacksonville Facility (now Symrise, Inc.); allowable emission rates for Cedar Bay, Anchor Glass, and IFF Chemical facilities)				
WestRock 24	Nassau	< 5 (GA)	Yes - Rayonier Performance Fibers (FL)	66.09 (based on 2012-2014 actual emissions for WestRock and Rayonier and permitted allowable emissions for three minor units at WestRock)	Yes (approximately 3 km into a portion of southern Georgia)			
White Springs	Hamilton	16 (GA)	Yes - PCS Suwannee River Plant* (FL)	56.34 (based on 2012-2014 actual emissions for sulfuric acid plants E & F and permitted allowable emissions for the PCS Suwaneee River Plant and the remaining sources at White Springs River Plant equivalent to 1,276 tpy)	No			

<sup>\*</sup> The PCS Suwannee River Plant shut down most of its operations in 2014.

-

<sup>&</sup>lt;sup>24</sup> As discussed in footnote 8, EPA's redesignation of the Nassau Area was based, in part, on a modeled attainment demonstration that included permanent and enforceable SO<sub>2</sub> controls and emissions limits at the Rayonier and WestRock facilities showing attainment of the 2010 1-hour SO<sub>2</sub> standard.

There are three DRR sources in neighboring states which are located within 50 km of Florida and which elected to provide air dispersion modeling under the DRR: Alabama Power Company - James M. Barry Electric Generating Plant (Plant Barry); Akzo Nobel Functional Chemicals - LeMoyne Site (AkzoNobel); and Escambia Operating Company - Big Escambia Creek Plant (Big Escambia), which are located approximately 36, 41, and 8 km, respectively, from the Florida border. These sources are all located in Alabama. With respect to the modeling and other information submitted by Alabama under the DRR for these modeled Alabama sources, EPA previously stated that the Agency does not have sufficient information to determine whether the areas around these sources meet or do not meet the 2010 1-hour SO<sub>2</sub> NAAQS or contribute to an area that does not meet the standard, and thus designated these areas as unclassifiable.<sup>25</sup> Accordingly, the Agency has further assessed AkzoNobel and Plant Barry in section III.C.2.b. of this action to determine whether there is evidence of a violation in Alabama with respect to interstate transport for the 2010 1-hour SO<sub>2</sub> NAAQS.

Regarding Big Escambia, the Alabama Department of Environmental Management (ADEM) provided supplemental information to EPA in correspondence dated September 5, 2019, September 20, 2019, and September 25, 2019, December 2, 2019, and December 6, 2019 (collectively, the "Big Escambia Supplement") to address interstate transport by evaluating potential SO<sub>2</sub> ambient air impacts in the neighboring state of Florida.<sup>26</sup> On December 31, 2019 (84 FR 72278), EPA published a notice of proposed rulemaking containing an evaluation of this supplemental information<sup>27</sup> and proposing to determine that ADEM's revised modeling for Big

\_

<sup>&</sup>lt;sup>25</sup> See EPA's initial and final technical support document (TSDs) for Alabama at: https://www.epa.gov/sites/production/files/2017-08/documents/3\_al\_so2\_rd3-final.pdf and https://www.epa.gov/sites/production/files/2017-12/documents/03-al-so2-rd3-final.pdf.

The Big Escambia Supplement is available in Docket ID: EPA-R04-OAR-2018-0792.
 EPA prepared a TSD- titled "Technical Support Document (TSD) Addressing Big Escambia

<sup>&</sup>lt;sup>27</sup> EPA prepared a TSD- titled "Technical Support Document (TSD) Addressing Big Escambia Data Requirements Rule (DRR) Modeling for the Purpose of Evaluating Interstate Transport" – analyzing the sufficiency of the model

Escambia can be used for evaluating interstate transport of SO<sub>2</sub> emissions from this facility to locations in Florida. Big Escambia is located 8 km from the Florida border, 21 km northwest from Breitburn Operating, L.P (Breitburn), the nearest SO<sub>2</sub> source in Florida. Breitburn is located less than 5 km from the Florida-Alabama border. Florida's submittal indicates that Breitburn's 2017 SO<sub>2</sub> emissions are 1,491 tons. Due to its proximity to Big Escambia, Alabama's modeling analysis includes Breitburn as a modeled nearby source using its permitted allowable emissions of 2,181 pounds per hour (9,553 tpy). This modeling indicates that the maximum impacts do not exceed the level of the 2010 1-hour SO<sub>2</sub> NAAQS. EPA believes that the modeling provides a conservative estimate of Breitburn's SO<sub>2</sub> impacts at locations in Alabama near the Florida-Alabama border, because the Big Escambia modeling used allowable emissions of SO<sub>2</sub> for Breitburn, which are approximately 6.4 times Breitburn's actual SO<sub>2</sub> emissions for 2017 (9,533 tons/1,491 tons = 6.4). Breitburn's 2014-2018  $SO_2$  emissions contained in EPA's Emissions Inventory System (EIS) are shown in Table 3 below. SO<sub>2</sub> emissions have remained fairly constant from 2014-2018, with the 2018 emissions representing the lowest emissions over that time period. Breitburn's 2014-2018 emissions profile demonstrates that Breitburn has consistently operated well below its permitted allowable emission rate. Thus, Breitburn's actual contribution to SO<sub>2</sub> concentrations in Alabama would likely be much less than the predicted concentrations in the Big Escambia modeling. Based upon this information, EPA proposes to find that SO<sub>2</sub> emissions from Breitburn will not contribute significantly to nonattainment in Alabama.

for use in evaluating interstate transport from Big Escambia. The TSD is located in the docket for that proposed rulemaking at Docket ID: EPA-R04-OAR-2018-0792.

Table 3: Breitburn SO <sub>2</sub> Emissions Trends (2014-2018) (tons)								
Source 2014 2015 2016 2017 2018								
Breitburn	1,327	1,454	1,461	1,491	1,242*			

<sup>\*</sup>Data submitted to EIS by FDEP.

EPA believes that the modeling results for the DRR sources located in Florida (summarized in Table 2) and available information for the areas surrounding the DRR sources in Alabama within 50 km of the Florida border do not indicate there are violations of the 2010 1-hour SO<sub>2</sub> NAAQS in Alabama to which Florida sources could contribute, based partially on the updated modeling completed by Alabama which addresses the Breitburn facility, weighed along with the other factors in this notice, support EPA's proposed conclusion that sources in Florida will not contribute significantly to nonattainment of the 2010 1-hour SO<sub>2</sub> NAAQS in any other state.

# 2. SO<sub>2</sub> Emissions Analysis

### a. State Submission

As discussed in section III.B, Florida's SIP revision presents SO<sub>2</sub> emissions from EPA's 2014 NEI by source category and statewide SO<sub>2</sub> emission trends for stationary industrial, onroad, nonroad, and nonpoint sources from 2000 to 2017. The State notes that SO<sub>2</sub> emissions from stationary, on-road, nonroad, and nonpoint sources have decreased by 90, 95, 99, and 61 percent, respectively, since 2000. FDEP states that the largest source categories of SO<sub>2</sub> emissions in Florida according to the 2014 NEI are chemical and allied product manufacturing and fuel combustion at electric utilities and industrial facilities. SO<sub>2</sub> emissions from industrial sources have decreased by 90 percent since the year 2000 due to unit shut downs, fuel switches from higher sulfur-emitting fuels to lower sulfur-emitting fuels, and SO<sub>2</sub> reductions due to sources' compliance with EPA's Mercury and Air Toxics Standards (MATS). FDEP anticipates

that emissions are expected to decrease further in the coming years due to additional emission unit shutdowns and fuel switches.

In addition, FDEP included 2014 and 2017 emissions for Florida's four DRR sources within 50 km of the State's border (discussed in section III.C.1 and listed in Table 2). From 2014 to 2017, total annual  $SO_2$  emissions from these four sources have decreased by 22,021 tons (74 percent) from 29,762 tons to 7,741 tons.

# b. EPA Analysis

EPA reviewed the  $SO_2$  emissions data from 1990 to 2017 for Florida and the adjacent states of Alabama and Georgia. EPA notes that statewide  $SO_2$  emissions for these states, including Florida, have decreased significantly over this time period. This data specifically shows that Florida's statewide  $SO_2$  emissions decreased from approximately 799,150 tons in 1990 to 100,850 tons in 2017.<sup>28</sup>

As discussed in section III.B, EPA also finds that it is appropriate to examine the impacts of SO<sub>2</sub> emissions from stationary sources emitting greater than 100 tons of SO<sub>2</sub> in Florida at distances ranging from zero km to 50 km from a neighboring state's border. Therefore, in addition to those sources addressed in section III.C.1.b. of this notice, EPA also assessed the potential impacts of SO<sub>2</sub> emissions from stationary sources not subject to the DRR that emitted over 100 tons of SO<sub>2</sub> in 2017 and are located in Florida within 50 km from the border. EPA assessed this information to evaluate whether the SO<sub>2</sub> emissions from these sources could interact with SO<sub>2</sub> emissions from the nearest source in a neighboring state in such a way as to impact a violation of the 2010 1-hour SO<sub>2</sub> NAAQS in that state. Table 4 lists the four sources in Florida not regulated under the DRR that emitted greater than 100 tpy of SO<sub>2</sub> in 2017 and are

<sup>&</sup>lt;sup>28</sup> State annual emissions trends for criteria pollutants of 14 emission source categories ("Tier 1") from 1990 to 2017 are available at: https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data.

located within 50 km of the State's border (i.e., Anchor Glass Container Corporation (Anchor), Breitburn, IFF Chemical Holdings, Inc. (IFF), and Symrise).

Table 4: Florida Non-DRR SO <sub>2</sub> Sources Emitting Greater Than 100 TPY Near Neighboring States								
Florida Source	2017 Annual SO <sub>2</sub> Emissions (tons)	Approximate Distance to Florida Border (km)	Closest Neighboring State	Approximate Distance to Nearest Neighboring State SO <sub>2</sub> Source (km)	Nearest Neighboring State Non-DRR SO <sub>2</sub> Source & 2017 Emissions (>100 Tons SO <sub>2</sub> )			
Anchor	117.1	26	Georgia	92	Brunswick Cellulose LLC (281.4 tons)			
Breitburn	1,491	<5	Alabama	16	Georgia-Pacific Brewton LLC (103 tons)			
IFF	494.1	27	Georgia	91	Brunswick Cellulose LLC (281.4 tons)			
Symrise	824.9	38	Georgia	81	Brunswick Cellulose LLC (281.4 tons)			

Currently, the monitoring and modeling data available to EPA does not suggest that Alabama and Florida are impacted by SO<sub>2</sub> emissions from the four Florida sources not subject to the DRR listed in Table 4. Of these four Florida sources, Anchor, IFF, and Symrise are located over 50 km from the nearest source in another state emitting over 100 tons of SO<sub>2</sub>. EPA believes that the distances greater than 50 km between sources make it unlikely that SO<sub>2</sub> emissions from these three Florida sources could interact with SO<sub>2</sub> emissions from these out-of-state sources in such a way as to contribute significantly to nonattainment in Alabama and Georgia.

The remaining source, Breitburn, is located at or less than 50 km from the nearest source in Alabama (Georgia-Pacific Brewton LLC) which emits greater than 100 tons of SO<sub>2</sub>. EPA's evaluation of potential SO<sub>2</sub> impacts from Breitburn on Alabama is discussed in Section III.C.1.b

of this notice. Based upon the analysis of the modeling for Alabama's Big Escambia in Section III.C.1.b, EPA believes that emissions from Breitburn are not contributing significantly to nonattainment in Alabama.

In addition, EPA evaluated the 2017 SO<sub>2</sub> emissions data for AkzoNobel and Plant Barry, two of the DRR sources in Alabama located within 50 km of the Florida border for which EPA could not rely on existing DRR modeling. This was done to assess whether Florida sources may potentially be impacting the areas surrounding these Alabama sources under the 2010 1-hour SO<sub>2</sub> NAAQS. Table 5 provides annual 2017 SO<sub>2</sub> emissions data for AkzoNobel and Plant Barry, along with the distances to the closest neighboring state's non-DRR sources emitting over 100 tpy of SO<sub>2</sub>. Table 6 shows the SO<sub>2</sub> emissions trends for AkzoNobel and Plant Barry from 2012-2017 (and 2018 if data is available).

Table 5: Alabama DRR SO <sub>2</sub> Sources Emitting Greater Than 100 TPY Near Neighboring States									
Alabama Source	2017 Annual SO <sub>2</sub> Emissions (tons)	Approxim ate Distance to Alabama (km)	Closest Neighboring State	Approximate Distance to Nearest Neighboring State SO <sub>2</sub> Source (km)	Nearest Neighboring State SO <sub>2</sub> Source & 2017 Emissions (>100 Tons SO <sub>2</sub> )				
Plant Barry	4,218	40	Mississippi	74	Mississippi Power Company - Plant Daniel (Plant Daniel) (204 tons)				
AkzoNobel	2,201	39	Mississippi	71	Plant Daniel (204 tons)				

Table 6: Alabama DRR SO <sub>2</sub> Sources Emitting Greater Than 100 TPY Near Neighboring States -									
Emissions Trends									
Alabama Source         2012         2013         2014         2015         2016         2017         2018									
Plant Barry*	10,731	13,448	10,690	8,688	5,421	4,218	5,257		
AkzoNobel	3,293	2,752	2,320	3,587	3,646	2,201	N/A**		

<sup>\*</sup> SO<sub>2</sub> emissions for Plant Barry are from EPA's Air Markets Program Data (AMPD) accessible at: https://ampd.epa.gov/ampd/.

<sup>\*\* 2018</sup> SO<sub>2</sub> emissions not available for AkzoNobel.

Table 5 shows that the distances between each facility and the nearest state's source to each facility which emits over 100 tpy of SO<sub>2</sub>, exceed 50 km. The closest sources in another state to AkzoNobel and Plant Barry are located in Mississippi; therefore, there are no Florida sources within 50 km of AkzoNobel and Plant Barry which could interact with SO<sub>2</sub> emissions from these Alabama sources in Table 4 in such a way as to contribute significantly to nonattainment in Alabama. Table 5 shows that SO<sub>2</sub> emissions have declined from 2012 to 2017/2018 for these Alabama sources.

EPA also considered whether any changes in controls or operations had occurred at AkzoNobel and Plant Barry. AkzoNobel entered into a consent decree with EPA which required more stringent emissions limits that have reduced SO<sub>2</sub> emissions at the facility by 2,340 tpy.<sup>29</sup> Plant Barry has retired Unit 3, and Units 1 and 2 are restricted to burn only natural gas as of January 1, 2017.

EPA also evaluated data from the Agency's Air Quality System (AQS)<sup>30</sup> from the SO<sub>2</sub> monitors in the surrounding areas of AkzoNobel and Plant Barry. The only monitor within 50 km of these sources is located in Mobile County, Alabama (AQS ID: 01-097-0003) and is approximately 23 km from AkzoNobel. The 2018 DV for this monitor is 11 ppb. EPA believes that the SO<sub>2</sub> emissions trends information in Florida's submission, the Agency's analysis of the sources in Tables 4 and 5, and the SO<sub>2</sub> emissions trends for AkzoNobel and Plant Barry in Table 6, support the Agency's conclusion that sources in Florida will not contribute significantly to nonattainment of the 2010 1-hour SO<sub>2</sub> NAAQS in a nearby state.

<sup>&</sup>lt;sup>29</sup> The consent decree, entered on November 21, 2019, is available at: https://www.justice.gov/enrd/consent-decree/file/1201231/download. A press release is available at: https://www.epa.gov/newsreleases/settlement-reached-nouryon-functional-chemicals-llc-fka-akzo-nobel-functional-chemicals.

<sup>&</sup>lt;sup>30</sup> EPA's AQS contains ambient air pollution data collected by EPA, state, local, and tribal air pollution control agencies. This data is available at https://www.epa.gov/air-trends/air-quality-design-values.

### 3. SO<sub>2</sub> Ambient Air Quality

### a. State Submission

In its September 18, 2018, SIP submission, FDEP included a table showing DV trends from 2007 to 2017 for Florida's 23 existing SO<sub>2</sub> air quality monitors. All of Florida's SO<sub>2</sub> air quality monitors have 2015-2017 SO<sub>2</sub> DVs below the level of the 2010 1-hour SO<sub>2</sub> NAAQS. FDEP notes that the majority of these 2015-2017 DVs are "well below" the 2010 1-hour SO<sub>2</sub> NAAQS and that several monitors show "significant decreases" in their SO<sub>2</sub> DVs over time.<sup>31</sup>

FDEP also identified recent maximum 1-hour SO<sub>2</sub> concentrations at the one monitor in Mobile County, Alabama, that is within 50 km of the Florida border and notes that these concentrations – 30.1 ppb in 2016 and 23.9 ppb in 2017 – are well below the level of the 2010 1-hour SO<sub>2</sub> NAAQS. FDEP also included the 2017 DV (5 ppb) for the next nearest SO<sub>2</sub> monitor – located in Georgia – and notes that this monitor's DV is seven percent of the 2010 1-hour SO<sub>2</sub> NAAQS.<sup>32</sup> In addition, FDEP identified the closest SO<sub>2</sub> nonattainment areas outside of Florida, with the nearest one located approximately 145 km away in St. Bernard Parish in New Orleans, Louisiana.

FDEP notes that on August 5, 2013 (78 FR 47191), EPA designated an area in Nassau County, Florida, as nonattainment for the 2010 1-hour SO<sub>2</sub> NAAQS based on ambient SO<sub>2</sub> monitoring data in the area for the three-year period 2009-2011 (round 1 designations). In Florida's SIP submission, the State indicates that this is the only SO<sub>2</sub> nonattainment area within 50 km of another state (approximately 4 km from the Georgia border). FDEP submitted a

<sup>&</sup>lt;sup>31</sup> See Table 3 of Appendix 1 of Florida's September 18, 2018, SIP submission.

<sup>&</sup>lt;sup>32</sup> FDEP inadvertently identified the nearest monitor in Georgia - located in Savannah, Georgia, approximately 155 km from the State's border - as AQS ID 13-021-0012. EPA has confirmed that the monitor with this ID is located in Macon, Georgia, approximately 241 km from the Florida border, and it has 2016, 2017, and 2018 DVs of 9, 5, and 4 ppb, respectively. The monitor located in Savannah, Georgia, is AQS ID 13-051-1002, and it has 2016, 2017, and 2018 DVs of 52, 48, 45 ppb, respectively.

redesignation request and maintenance plan for the area on June 7, 2018. EPA notes that, subsequent to the state's submission, the Agency approved Florida's request to redesignate the Nassau County area to attainment for the 2010 1-hour SO<sub>2</sub> NAAQS and the accompanying SIP revision containing the maintenance plan for the area on April 24, 2019 (effective May 24, 2019). *See* 84 FR 17085.

# b. EPA Analysis

Since the time of development of Florida's SIP submission, DVs based on more recent certified monitoring data from monitors in EPA's AQS ("AQS monitors") have become available for Florida and the surrounding states. The most recent certified 3-year DV period is 2016-2018. EPA has summarized the DVs from 2012 to 2018 for AQS monitors in Florida within 50 km of another state in Table 7. The 2010 1-hour SO<sub>2</sub> standard is violated at an ambient air quality monitoring site (or in the case of dispersion modeling, at an ambient air quality receptor location) when the 3-year average of the annual 99<sup>th</sup> percentile of the daily maximum 1-hour average concentrations exceeds 75 ppb, as determined in accordance with Appendix T of 40 CFR part 50.

Table 7: Trend in 1-Hour SO <sub>2</sub> DVs (ppb) for AQS Monitors in Florida Within 50 km of Another State									
County	AQS Site Code	2010- 2012	2011- 2013	2012- 2014	2013- 2015	2014- 2016	2015- 2017	2016 -2018	Approx imate Distance to State Border (km)
Duval	12-031-0032	16	17	17	16	16	16	18	39 (GA)
Duval	12-031-0080*	13	11	17	17	17	10	ND**	37 (GA)
Duval	12-031-0081	29	29	27	23	20	12	11	38 (GA)
Duval	12-031-0097*	18	21	21	23	18	14	ND**	43 (GA)
Escambia	12-033-0004	27	22	25	24	16	8	6	20 (AL)
Hamilton	12-047-0015	23	25	ND**	ND**	ND**	ND**	ND**	19 (GA)
Nassau	12-089-0005	122	70	57	58	51	43	37	6 (GA)

\* EPA approved the discontinuation of two SO<sub>2</sub> monitors in Duval County (AQS IDs: 12-031-0080 and 12-031-0097) in 2018.

As shown in Table 7, the 2012-2018 DVs for six of the seven monitoring sites in Florida within 50 km of another state's border have remained below the level of the 2010 1-hour SO<sub>2</sub> NAAQS, with the exception of the Nassau County monitor which had a 122 ppb DV for the 2010-2012 period. The DVs at the Nassau County monitor have declined over the 2013 through 2018 DV time periods, and these DVs are all below the level of the 2010 1-hour SO<sub>2</sub> NAAQS. The Hamilton County monitor has 2012 and 2013 DVs of 23 and 25 ppb, respectively, and incomplete data for the remaining DV time periods (2014-2018). The Hamilton County monitor has not measured a daily exceedance of the 2010 1-hour SO<sub>2</sub> NAAQS since 2013.

There is one AQS monitor in Alabama (Mobile County) which is located within 50 km of the Florida border. This monitor is approximately 45 km from Florida and began operation on January 1, 2016. The monitor has a complete, quality-assured 2016-2018 DV of 11 ppb, which is 85 percent below the level of the 2010 1-hour SO<sub>2</sub> NAAQS. The Mobile County monitor has measured no daily exceedances of the 2010 1-hour SO<sub>2</sub> NAAQS during its years of operation.

EPA also evaluated monitoring data provided to date for AQS monitors located in states adjacent to Florida and neighboring states within 50 km of the State's border that were established to characterize the air quality around specific sources subject to EPA's DRR to inform the Agency's future round 4 designations for the 2010 1-hour SO<sub>2</sub> NAAQS in lieu of modeling. No sources in Florida elected to establish monitors under the DRR and there are no DRR monitors within 50 km of the Florida border located in the adjacent states of Alabama and Georgia.

<sup>\*\*</sup> ND indicates "No Data" due to monitor startup or shutdown (operated less than three years), data quality issues, or incomplete data.

EPA believes that the air quality data for monitors within 50 km of the Florida border within the State and in surrounding states support EPA's proposed conclusion that Florida will not contribute significantly to nonattainment of the 2010 1-hour SO<sub>2</sub> NAAQS in any other state.

### 4. SIP-Approved Regulations Addressing SO<sub>2</sub> Emissions

#### a. State Submission

In its September 18, 2018, SIP submission, Florida identified SIP-approved measures which help ensure that SO<sub>2</sub> emissions in the State do not contribute significantly to nonattainment of the 2010 1-hour SO<sub>2</sub> NAAQS in any other state. FDEP indicates that many of the current SIP-approved rules are adopted under the authority of subsection 403.061(35), Florida Statutes. FDEP lists the following SIP-approved Florida rule chapters of the Florida Administrative Code (F.A.C.) which establish emission limits and other control measures for SO<sub>2</sub>: Chapter 62-210, F.A.C., Stationary Sources - General Requirements; Chapter 62-212, F.A.C., Stationary Sources - Preconstruction Review; and Chapter 62-296, F.A.C., Stationary Sources - Emission Standards. Chapter 62-210, F.A.C establishes definitions and the general requirements for major and minor stationary sources of air pollutant emissions. Chapter 62-212, F.A.C. establishes the preconstruction review requirements for proposed new emissions units, new facilities, and modifications to existing units and facilities. Chapter 62-296, F.A.C. establishes emission limiting standards and compliance requirements for stationary sources of air pollutant emissions, including SIP emission limits that restrict SO<sub>2</sub> emissions from various source categories (e.g., EGUs (Rule 62-296.405, F.A.C.) and sulfuric acid plants (Rule 62-296.402, F.A.C.)) and source-specific SO<sub>2</sub> emission limits that form the basis of Florida's SO<sub>2</sub> nonattainment area SIPs.

### b. EPA Analysis

As part of EPA's weight of evidence approach to evaluating 2010 SO<sub>2</sub> transport SIPs, EPA considered Florida's SIP-approved measures summarized in III.C.4.a. of this notice, which establish emission limits, permitting requirements, and other control measures for SO<sub>2</sub>. For the purposes of ensuring that SO<sub>2</sub> emissions at new major sources or major modifications at existing major sources in Florida do not contribute significantly to nonattainment of the NAAQS, the State has a SIP-approved major source new source review (NSR) program. Chapters 62-210 and 62-212, F.A.C. collectively regulate the construction of any new major stationary source or any modification at an existing major stationary source in an area designated as nonattainment, attainment, or unclassifiable. The State's SIP-approved prevention of significant deterioration (PSD) regulations are found in Chapters 62-210, F.A.C., Stationary Sources – General Requirements, and 62-212, F.A.C., Stationary Sources – Preconstruction Review, F.A.C., which apply to the construction of any new major stationary source or major modification at an existing major stationary source in an area designated as attainment or unclassifiable or not yet designated. Florida's SIP-approved rules, 62-210.300, F.A.C., and 62-212.300, F.A.C., collectively govern the preconstruction permitting of modifications to and construction of minor stationary sources. These major and minor NSR rules are designed to ensure that SO<sub>2</sub> emissions due to major modifications at existing major stationary sources, modifications at minor stationary sources, and the construction of new major and minor sources subject to these rules will not contribute significantly to nonattainment of the 2010 1-hour SO<sub>2</sub> NAAQS in neighboring states.

- 5. Federal Regulations Addressing SO<sub>2</sub> Emissions in Florida
- a. State Submission

FDEP notes that MATS has helped to reduce SO<sub>2</sub> emissions from industrial sources as discussed in section III.C.2.a of this notice.

### b. EPA Analysis

EPA agrees that MATS is a federal control measure which has helped to reduce SO<sub>2</sub> emissions in Florida, along with other federal regulatory programs such as: 2007 Heavy-Duty Highway Rule; Acid Rain Program; National Emission Standards for Hazardous Air Pollutants; New Source Performance Standards; Nonroad Diesel Rule; and Tier 1 and 2 Mobile Source Rules. EPA believes that MATS, along with the other federal measures EPA identified, have and continue to lower SO<sub>2</sub> emissions, which, in turn, supports EPA's proposed conclusion that SO<sub>2</sub> emissions from Florida will not contribute significantly to nonattainment of the 2010 1-hour SO<sub>2</sub> NAAQS in another state.

#### 6. Conclusion

EPA proposes to determine that Florida's September 18, 2018, SIP submission satisfies the requirements of prong 1 of CAA section 110(a)(2)(D)(i)(I). This proposed determination is based on the following considerations: DVs for six of Florida's seven AQS SO<sub>2</sub> monitors within 50 km of another state's border have remained below the 2010 1-hour SO<sub>2</sub> NAAQS since 2013 and six of these monitors have had DVs well below the 2010 1-hour SO<sub>2</sub> NAAQS since 2011 (the seventh monitor in Hamilton County, Florida, has no data to calculate DVs for the 2012-2014 through the 2016-2018 time periods); the 2018 99<sup>th</sup> percentile 1-hour SO<sub>2</sub> concentrations for Alabama's Mobile County monitor within 50 km of Florida's border is well below the level of the 2010 1-hour SO<sub>2</sub> NAAQS for the 2016-2018 time period; modeling for the DRR sources within 50 km of the Florida border both within the State and in Alabama estimates impacts below the level of the 2010 1-hour SO<sub>2</sub> NAAQS; downward SO<sub>2</sub> emissions trends in Florida;

SO<sub>2</sub> emissions from Florida sources not subject to the DRR which each emitted over 100 tons of SO<sub>2</sub> in 2017 are not likely interacting with SO<sub>2</sub> emissions from the nearest out-of-state source in a bordering state in such a way as to cause a violation in Alabama and Georgia due to either distances over 50 km between the sources or, in the case of Breitburn, modeling which includes this source at much higher permitted emissions shows impacts below the level of the 2010 1-hour SO<sub>2</sub> NAAQS; and current Florida SIP-approved measures and federal emissions control programs ensure control of SO<sub>2</sub> emissions from sources within Florida.

Based on the analysis provided by Florida in its SIP submission and EPA's analysis of the factors described in section III.C, EPA proposes to find that sources within Florida will not contribute significantly to nonattainment of the 2010 1-hour SO<sub>2</sub> NAAQS in any other state.

# D. EPA's Prong 2 Evaluation – Interference with Maintenance of the NAAQS

Prong 2 of the good neighbor provision requires state plans to prohibit emissions that will interfere with maintenance of a NAAQS in another state.

#### 1. State Submission

In its September 18, 2018, SIP submission, FDEP confirms that Florida will not interfere with maintenance of the 2010 1-hour SO<sub>2</sub> standard in any other state. FDEP bases its conclusion for prong 2 on: the localized nature of SO<sub>2</sub> dispersion, emissions, and monitoring data presented in the submission and discussed in sections III.C.2.a and III.C.3.a of this notice, and DRR modeling for large SO<sub>2</sub> sources within 50 km of the State border which shows the areas around these sources are not exceeding the level of the 2010 1-hour SO<sub>2</sub> NAAQS. As discussed in sections III.C.4 and III.C.5, FDEP has SIP-approved measures which address sources of SO<sub>2</sub> emissions in Florida and there are also federal measures that control SO<sub>2</sub> emissions in the State. Specifically, FDEP notes that SIP-approved sections of Chapters 62-210 and 62-212, F.A.C.,

require any new major source or major modification to undergo PSD or nonattainment NSR permitting to demonstrate that the source will not cause or contribute to a violation of any NAAQS in Florida or any other state. FDEP also states that Florida's SIP contains other emission limiting standards such as Chapter 62-296, F.A.C., which includes SIP emissions limits that restrict SO<sub>2</sub> emissions from various source categories.

### 2. EPA Analysis

In *North Carolina v. EPA*, the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit) explained that the regulating authority must give prong 2 "independent significance" from prong 1 by evaluating the impact of upwind state emissions on downwind areas that, while currently in attainment, are at risk of future nonattainment. *North Carolina v. EPA*, 531 F.3d 896, 910-11 (D.C. Cir. 2008). EPA interprets prong 2 to require an evaluation of the potential impact of a state's emissions on areas that are currently measuring clean data, but that may have issues maintaining that air quality. Therefore, in addition to the analysis presented by Florida, EPA has also reviewed additional information on SO<sub>2</sub> air quality and emission trends to evaluate the State's conclusion that Florida will not interfere with maintenance of the 2010 1-hour SO<sub>2</sub> NAAQS in downwind states. This evaluation builds on the analysis regarding significant contribution to nonattainment (prong 1).

For the prong 2 analysis, EPA evaluated the data discussed in section III.C. of this notice for prong 1, with a specific focus on evaluating emissions trends in Florida, analyzing air quality data, and assessing how future sources of SO<sub>2</sub> are addressed through existing SIP-approved and federal regulations. Given the continuing trend of decreasing SO<sub>2</sub> emissions from sources within Florida, and the fact that all areas in other states within 50 km of the Florida border which have existing monitors have DVs attaining the 2010 1-hour SO<sub>2</sub> NAAQS, EPA believes that

evaluating whether these decreases in emissions can be maintained over time is a reasonable criterion to ensure that sources within Florida do not interfere with its neighboring states' ability to maintain the 2010 1-hour SO<sub>2</sub> NAAQS.

With respect to air quality data trends, the 2016-2018 DVs for AQS SO<sub>2</sub> monitors both in Florida within 50 km of another state's border and in Alabama within 50 km of Florida's border are below the 2010 1-hour SO<sub>2</sub> NAAQS. Further, modeling results for DRR sources within 50 km of Florida's border within the State demonstrate attainment of the 2010 1-hour SO<sub>2</sub> NAAQS, and thus, demonstrate that Florida's largest point sources of SO<sub>2</sub> are not expected to interfere with maintenance of the 2010 1-hour SO<sub>2</sub> NAAQS in another state.

EPA believes that federal and SIP-approved State regulations discussed in sections III.C.4 and III.C.5 that both directly and indirectly reduce emissions of SO<sub>2</sub> in Florida help ensure that the State does not interfere with maintenance of the NAAQS in another state. SO<sub>2</sub> emissions from future major modifications and new major sources will be addressed by Florida's SIP-approved major NSR regulations described in section III.C.4. In addition, Florida has a SIP-approved minor NSR permit program addressing small emission sources of SO<sub>2</sub>. The permitting regulations contained within these programs are designed to ensure that emissions from these activities do not interfere with maintenance of the 2010 1-hour SO<sub>2</sub> NAAQS in the State or in any other state.

#### 3. Conclusion

EPA proposes to determine that Florida's September 18, 2018, SIP submission satisfies the requirements of prong 2 of CAA section 110(a)(2)(D)(i)(I). This determination is based on the following considerations: SO<sub>2</sub> emissions statewide from 2000 to 2017 in Florida have declined significantly; SO<sub>2</sub> emissions from Florida's non-DRR sources emitting greater than 100

tpy in 2017 listed in Table 4 of this notice are not likely interacting with SO<sub>2</sub> emissions from the nearest out-of-state source in a bordering state in such a way as to interfere with maintenance of the 2010 1-hour SO<sub>2</sub> NAAQS in Alabama and Georgia due to either distances over 50 km between the sources or, in the case of Breitburn modeling which includes this source at much higher permitted emissions shows impacts below the level of the 2010 1-hour SO<sub>2</sub> NAAQS; current Florida SIP-approved measures and federal emissions control programs ensure control of SO<sub>2</sub> emissions from sources within Florida; Florida's SIP-approved PSD and minor source NSR permit programs will address future large and small SO<sub>2</sub> sources; current DVs for AQS SO<sub>2</sub> monitors both in Florida within 50 km of another state's border and in Alabama within 50 km of Florida's border are below the level of the 2010 1-hour SO<sub>2</sub> NAAQS; and modeling for DRR sources within 50 km of Florida's border both within the State and in Alabama demonstrate that Florida's largest point sources of SO<sub>2</sub> are not expected to interfere with maintenance of current attainment of the 2010 1-hour SO<sub>2</sub> NAAQS in another state. Based on the analysis provided by Florida in its SIP submission and EPA's supplemental analysis of the factors described in section III.C and III.D of this notice, EPA proposes to find that emission sources within Florida will not interfere with maintenance of the 2010 1-hour SO<sub>2</sub> NAAQS in any other state.

# IV. Proposed Action

In light of the above analysis, EPA is proposing to approve Florida's September 18, 2018, SIP submission as demonstrating that emissions from Florida will not contribute significantly to nonattainment or interfere with maintenance of the 2010 1-hour SO<sub>2</sub> NAAQS in another state.

### V. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. *See* 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. This proposed action merely proposes to approve state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted under Executive Order 12866;
- Does not impose an information collection burden under the provisions of the Paperwork
   Reduction Act (44 U.S.C. 3501 et seq.);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);

Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355,

May 22, 2001);

Is not subject to requirements of Section 12(d) of the National Technology Transfer and

Advancement Act of 1995 (15 U.S.C. 272 note) because application of those

requirements would be inconsistent with the CAA; and

Does not provide EPA with the discretionary authority to address, as appropriate,

disproportionate human health or environmental effects, using practicable and legally

permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

The SIP is not approved to apply on any Indian reservation land or in any other area

where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of

Indian country, the rule does not have tribal implications as specified by Executive Order 13175

(65 FR 67249, November 9, 2000), nor will it impose substantial direct costs on tribal

governments or preempt tribal law.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental

relations, Particulate Matter, Reporting and recordkeeping requirements, Sulfur oxides.

Authority: 42 U.S.C. 7401 et seq.

Dated: January 30, 2020.

Mary S. Walker,

Regional Administrator,

Region 4.

[FR Doc. 2020-02502 Filed: 2/7/2020 8:45 am; Publication Date: 2/10/2020]

35